



Cost-Benefit Analysis

March 2004

Prepared for the Towns of Hamilton and Wenham

Consolidation of Police Services

Consolidation of Fire Services

Introduction

The Boards of Selectmen of the Towns of Hamilton and Wenham retained the Municipal Police Institute, Inc. (MPI) to conduct a financial feasibility study of various shared and/or consolidation options of police and fire services and operations in these towns. This report also includes a legal analysis of shared service options for police and fire services between municipalities, provided by MPI counsel Jack Collins. A financial analysis of police regionalization is provided by MPI Executive Director Richard Marchese and fire services by Stephen Foley, former senior staff member of the National Fire Protection Association, now Deputy Director of Special Operations for the U.S. Capital Police.

This issue of Hamilton and Wenham public safety services consolidation has been studied several times. Each time, the studies have concluded that regionalization should not be pursued, mainly for political reasons. Most recently, the League of Women Voters of Hamilton and Wenham undertook a comprehensive review (“Statement of Consensus on Shared Services” dated November 10, 2003). Hamilton Town Administrator Candace Wheeler and Wenham Town Administrator Jeff Chelgren compiled historical, legal and cost comparative data (Towns of Hamilton & Wenham Police & Fire Departments Regionalization Study, rev. 11/11/03) and concluded that further financial analysis of potential shared services and equipment (“capital reduction plan”) would be needed to better understand the potential cost savings. Both Hamilton and Wenham are currently considering building plans for their police departments to replace inadequate 50-year old facilities. Both towns have public safety facilities shared by their respective police and fire departments that exist along the same roadway and are within one mile of each other. The two towns are similar in character, both affluent bedroom communities with little or no industry, although Hamilton (8315 pop.) is nearly twice the population of Wenham (5008 pop.).

The Towns' Police and Fire Departments currently take advantage of all methods of cost saving through cooperation commonly in use in Massachusetts. The operational and political obstacles arising from the many complex issues of jurisdiction/power of arrest, liability, command and control, hiring/discipline/supervision of personnel, and cost allocation outweigh the cost savings that could be realized by two departments,

controlled and funded by two different Town Governments, sharing one building under negotiated intermunicipal agreements.

Many Towns, Hamilton and Wenham included, have chosen to combine their respective School Systems, all doing so through the creation of a Regional School Board under State Statute for administration purposes. We know of no Towns who have attempted to combine Police or Fire Departments through intermunicipal agreements.

Following the Executive Summary, the section entitled "Legal Foundations for Sharing of Public Safety Resources" by Attorney Jack Collins, will explain the legal issues regarding the combination of Police and Fire Services in the Commonwealth of Massachusetts in detail.

Executive Summary

Report Content

- The study compares the expected operating and capital costs of maintaining separate police and fire departments for each town with the estimated operating and capital costs of “regionalizing” each of these services. The study includes a section setting forth the various legal tools and obstacles for sharing public safety services.

Assumptions

- A key assumption in this study was that the current level of police and fire services is greatly valued by the citizens of each town, and is **NOT TO BE REDUCED** as part of a consolidation scenario for police. Based on this assumption, we have kept the total number of officers in a regional department the same as the combined total of current departments

Intermunicipal Agreement v. Statutory Model

- If full regionalization were implemented, the towns had indicated a preference for using intermunicipal agreements for consolidation, rather than the statutory “district” models under the Mass. General Laws. However, given the nature and complexity of police and fire services, the authors of the study conclude that the statutory mechanisms may be the best available option for consolidation, even though they are untried in Massachusetts for combining services between municipalities.

Cost-Benefit Analysis

- When the operating and capital costs of full regionalization are estimated, it has been determined that regionalization would actually bring about a NET INCREASE in the cost of providing police and fire services in Hamilton and Wenham.

Police-Ambulance

- For police services, the major drivers of the increased costs are wages, and the net increase when Hamilton's police-run ambulance (which produces a net surplus financially) is replaced by increased coverage by a private ambulance service for Hamilton and Wenham.

Varied Impact

- The overall net increase in costs for the two towns masks a strong difference in impact on each town. In particular, police service consolidation would SAVE Wenham a net \$64,202 in annual operating costs, but would COST Hamilton an additional \$439,958 in annual operating costs. (See Chart 1, Page 21.) The negative impact on Hamilton would wipe out any capital savings from sharing a single new building (See Chart 2, Page 33.)

Shared Services Analysis

- The Towns also asked the consultants to provide cost-benefits analysis of shared-service and cooperative measures short of full regionalization, that could save money and/or improve service. For both police and fire services, the consultants found that in Hamilton and Wenham, the departments have already found and implemented just about all the cooperative programs and tools available. These tools include joint emergency dispatch, and extensive use of mutual aid by both police and fire, which allows towns to have less staff and equipment than they would need if they had to be entirely self-sufficient. Both police and fire already use group purchasing through state organizations like the Greater Boston Police Council. The report enumerates several other forms of regional cooperation and efficiency already in effect. So, in looking for additional cooperative opportunities for reducing operating costs, we found little to add to the current methods already in use.

Capital Impact

- The other focus for possible cost savings in public safety is capital cost savings from building a single shared new police or fire station, rather than two separate stations. New construction is unavoidable for long, as both towns have inadequate police and fire stations, in terms of office space, storage space, and vehicle space.

Capital Impact – Single Police Structure

- Chart 2, Page 33, shows that by consolidating police departments into one new police station, rather than two separate stations, Wenham would save \$41,018 in annual debt service on construction costs, and Hamilton would save \$30,106 on its annual debt service. However, when these modest capital savings are combined with the net impact of consolidation on each town's operating costs, the net results are as follows:
 - A joint police department in one shared station is \$409,851 per year MORE COSTLY for Hamilton, as compared to operating as a separate department in its own separate new building.
 - A joint police department in one shared station SAVES Wenham \$105,220 per year, compared to operating as a separate department in its own separate new building.
 - Clearly, Hamilton has no financial incentive to pursue regionalization of their police services with Wenham, given the assumption of maintaining current service levels and given the other conservative assumptions used for the financial impact assessments.

Capital Impact – Shared Fire Structure

- For both Hamilton's and Wenham's fire departments, service levels are already in compliance with national, state and insurance industry standards, and both towns are capturing the greatest possible savings in labor costs by utilizing mainly call fire personnel.

- Any move to further enhance service levels via improving response times for eastern areas of Hamilton and Wenham, by creating either a shared station or separate stations in that neighborhood, would precipitate a shift from mainly call-fire to mainly full-time round-the-clock departments for both towns. This would greatly increase operating costs of both towns overwhelming any savings on fire engine replacement, (which is not a huge cost when annualized over ten years).

Implementation Costs

- This study does not attempt to quantify the one-time transition costs of regionalizing police and/or fire services. However, one-time consulting and legal costs for labor mediation, legal services, and transitional administrative support would be substantial and likely to be ongoing throughout consolidation period. Given the absence of significant economic savings for the two towns, the transitional costs become just another reason not to move toward regionalization at this time.

Legal Foundations for Sharing Public Safety Resources

In Massachusetts, it is not uncommon for neighboring municipalities to assist one another, especially in public safety emergencies. This is often done without any formal agreement or expectation of reimbursement. However, over the years a number of options have emerged for public safety resource sharing. They include such things as regional fire districts, mutual aid agreements, regional task forces, law enforcement councils and the appointment of “special police officers” in neighboring communities. For towns such as Hamilton and Wenham, where there is a history of inter-municipal cooperation, it is natural to explore periodically whether more formal or alternative public safety resource sharing options are worth pursuing.

The recently completed report prepared by the League of Women Voters (LWV) of Hamilton and Wenham offers an excellent overview of potential public safety cooperation options. As a follow-up to the LWV report, the following discussion will focus on legal issues and operational concerns associated with various resource sharing alternatives.

POLICE AREA

Under various provisions of the Massachusetts General Laws, towns may share police resources. The most notable are:

1. Regional Police Districts
 - M.G.L. c. 41, § 99B-K
2. Mutual Aid Agreements
 - M.G.L. c. 41, § 8G
3. Special Police Officer Appointments
 - M.G.L. c. 41, § 96, 97 & 97A
4. Requisition of Officers
 - M.G.L. c. 41, § 99

Regional Police Districts

It does not appear that any communities have adopted the “regional police district” statute. In essence, this would create an independent governmental unit, similar to a regional school or library arrangement. There would be one police force, from top to bottom. One chief would be in charge, reporting to a regional police district commission, which functions much the same as a board of selectmen but with budget-making and “taxing” power similar to a town meeting. It is probably the latter authority that has kept municipalities from adopting this form of police sharing.

If Hamilton and Wenham want to completely integrate their police forces, this statute is the logical way to proceed. While alternative arrangements are theoretically possible, e.g., inter-municipal agreements, there is some risk that a court would rule that accepting the regional police district enabling legislation is the exclusive mechanism for full integration. Under what is called the doctrine of *preemption*, where the state legislature has so completely addressed an issue, a city or town may not be free to proceed except as the statute provides. Since there have been no court cases on this issue to date, how a court would rule on this is, of necessity, speculative. It could prove very expensive to proceed too far only to have a series of intermunicipal agreements declared void.

Mutual Aid Agreements

Under the mutual aid law, M.G.L. c. 41, § 8G, two or more communities (after “accepting” the statute at their town meeting) may sign agreements to provide police personnel and/or equipment to one another from time to time. This is not meant as an avenue for integration. With the exception of ongoing activities such as regional drug task forces, mutual aid agreements are intended to cover situations where the resources in one community are temporarily unable to handle a given law enforcement requirement. Some departments may even “push” the law a little and utilize such agreements for matters such as paid details or periodic training and employment of a regional tactical emergency response (SWAT, e.g.) unit. In all cases, officers remain employees of their home department and are subject to recall as their chief or command officer sees fit.

A mutual aid agreement typically provides for methods of activation and addresses issues of compensation, command and liability.

The mutual aid arrangement appears to have served Hamilton and Wenham well to date. For routine matters, they help out each other, often on a daily basis. For potentially larger issues, their participation in the North Eastern Massachusetts Law Enforcement Council (NEMLEC) programs, especially where State Police resources are still available as needed, should suffice.

Special Police Officer Appointments

The power to appoint full-time officers also includes the ability to appoint others with lesser powers, including part-time, reserve and special police officers. Where neighboring departments work together as often as do Hamilton and Wenham, it is not unusual for the regular police officers in one town to be appointed as “specials” in the other. The Boards of Selectmen in both Hamilton and Wenham, pursuant to G. L. c. 41, s. 97A, are the “appointing authority” for police officers in their respective communities. Unless restricted by the Selectmen in their appointment, or by their chiefs through order or Rules & Regulations, such special officers have complete police powers, both on and off duty. Most often, this enables on-duty officers to cross town lines freely during their tour of duty as needed.

Requisition of Officers

Another mechanism for requesting officers from a neighboring department is provided under M.G.L. c. 41, § 99. It does not require “acceptance” by any party. So long as a request is made by the selectmen, chief or commanding officer of one community, officers from another community may be sent by the selectmen, chief or commanding officer of the “sending” town. The statute specifies that responding officers shall have full police power and immunity. The law authorizes the sending department to recoup its costs, although that provision is not often used.

This process is used daily in numerous communities throughout Massachusetts. No money ever seems to change hands as most places feel it all “comes out even” over time.

COST SAVING POTENTIALS

Communities typically find that the bulk of their police department's budget is devoted to personnel. Unless the two communities really believe that there are too many officers on duty at a given time, there is little financial advantage in pursuing more formal integration, such as under a regional police district. Overall, if nearly all of the needs of both communities are currently being met by existing cooperative arrangements, there is no cost savings likely from any dramatic changes.

The areas that might hold some hope for cost cutting include combining the positions of chief, or using a single police station. These could each be accomplished without going to a regional police district. Again, see financial section of this study for cost estimates, which are not encouraging as to savings.

If both Boards of Selectmen were to appoint the same individual as their police chief, that person would have command authority over both departments. The salary would presumably be higher than each town is now paying, but lower than the combined total being paid to two chiefs. It is also possible that some shared clerical or administrative civilian personnel could be involved in such a "shared chief" arrangement. However, a reduction of the number of such support personnel is unlikely.

A close look at the resulting command structures of each department should accompany any review of the costs and benefits of combining the chief's duties. While no reduction is likely, some increased opportunity for specialization may result. For example, some supervisory personnel may be more available for extra emphasis on detective duty, court assignment, patrol supervision or similar areas that the chief determines might benefit.

All existing Rules & Regulations, Policies & Procedures, General Orders and collective bargaining agreements would stay in place under the combined chief option.

The use of a single police facility poses no undue legal issues. If the station were to be located in one town, the officers of the other town should certainly be appointed

“specials” by the host community so they would have police powers traveling to and from the station, as well as while working at such facility.

Some review of the collective bargaining agreements would be required. Similarly, bargaining with the respective unions would be necessary over changes in or “impacts” to working conditions. However, neither town’s unions would be able to “veto” such changes.

Lastly, since a regional police district would be independent of either town’s budget, some might argue that this route would free up the amount currently allotted to police services, or at least not be subject to the Proposition 2 ½ limitations. This might do no more than move the figures out of the town’s regular municipal department budget. The total cost is not likely to decrease. This is very nearsighted and would not be a true picture of the cost-saving potential of pursuing the “district” alternative.

FIRE AREA

The history of mutual aid among fire departments in Massachusetts is far more extensive than on the police side. Rarely is there a fire of any significance where area departments do not respond in some fashion.

While not always utilized, virtually all personnel-sharing options available to police departments are likewise available to the fire service. The most commonly used, however, are mutual aid agreements and “fire districts”.

Mutual Aid

In a much simpler manner than its police counterpart, M.G.L. c. 48, §59A authorizes mutual aid for fire departments. Rather than requiring a town meeting acceptance, § 59A permits the two towns, “by by-law, or by vote of the . . . selectmen” to authorize their respective fire departments to go to each other’s aid. The law grants the firefighters the same immunities and privileges in each other’s town when so responding.

Unless the communities have an agreement to the contrary, the sending department is responsible for its costs of personnel and equipment and any resulting civil liability.

Fire Districts

A fire district could be established under M.G.L. c. 48, §§ 60-80. While not required, presumably the district would encompass both towns completely.

Much the same as the regional police districts discussed earlier (as well as regional schools and libraries), the law essentially creates an independent government unit. However, unlike the police district enabling law, numerous fire districts have been created across the state. Their operation is well-understood.

COST SAVINGS POTENTIAL

Municipal fire budgets invariably increase whenever a town moves from a call to a full-time department. Even where, as in Hamilton and Wenham, there is a small full-time force backed up by call firefighters, the expansion of the full-time component, while often worthwhile or even necessary, does cost more. This would most likely be the case if a fire district were to be established. However, some might argue that with its own budget and “taxing” authority, the district would theoretically free up some of the town’s ability to fund budget items since the current cost of fire service would be removed. As noted in the discussion concerning a police district, this is not a true picture, in terms of actual impact on the taxpayer, several costs would likely rise.

With its own taxing ability, the district could raise and appropriate money that would be paid by residents and businesses in addition to their municipal real estate tax bills. (The Proposition 2½ limit imposed on the Town Meeting would not prevent the district from taxing and spending additional money.) Nor would such action come under the purview of the Finance Committee, Selectmen or other officials from either town.)

Combining the positions of fire chief is a legally viable option. Much the same as discussed above regarding the police chief, the Boards of Selectmen would simply appoint the same person as chief of their respective town’s fire department. Obviously, this option, makes sense only where one chief retires or the position otherwise becomes vacant.

The cost-saving potential would be similar to that of sharing a police chief.

Similarly, the sharing of a central fire station, or possibly even substations, could produce savings. The legal issues associated with such moves would be similar to those

voted for a combined police station discussed earlier.

Shared vehicles or fire suppression equipment do not present serious legal problems.

INTER-MUNICIPAL AGREEMENTS

Given the legislature's enactment of regional fire and police district statutes, the towns would be on unchartered legal grounds were they to attempt a full integration of their public safety agencies strictly by way of inter-municipal agreements. M.G.L. c. 40, §4A would be pushed to – if not beyond – the limit in such case. It is possible that a court would approve such an arrangement, but the legal costs, time delays and resulting uncertainties favor proceeding with caution. In short, if a combined department is what the towns want, adopting the “district” route is the most safe approach. On the other hand, where they want to attempt periodic cost-savings through shared personnel, chiefs, equipment or buildings, this can be done under existing laws with limited use of inter-municipal agreements, as necessary.

Financial Analysis of Police Consolidation

Both towns have well-respected police departments, short response times and very low crime rates. Both departments are headed by Chiefs who take an active role in delivering police services to their respective towns, as is common in departments with fewer than twenty full-time personnel.

Both departments are members of the 35-town North Eastern Massachusetts Law Enforcement Council (NEMLEC), which provides assistance to member departments in the form of riot, hostage negotiation, SWAT and other services in times of a major incident. The NEMLEC membership is a cost-effective way to provide these seldom needed, but critical, specialty services to small forces.

Hamilton and Wenham police departments also provide back up for each other for more “routine” needs when the two officers on duty in any one town may be insufficient. Attorney Collins’ report details the statutory provisions that allow for officers to perform police service outside their regular jurisdiction, when formally requested.

Both Departments take advantage of Statewide purchasing benefits offered by their membership in The Greater Boston Police Council. This buying power is available for most police equipment, including cruisers.

Hamilton and Wenham police departments have already combined the most common shared police service in Massachusetts: emergency dispatch. Other areas of cooperation common to Massachusetts such as Mutual Aid, group purchasing, training coordination, regional service groups are also taken advantage of, not only between Hamilton and Wenham, but also between many of the area Towns. The region is considered a leader in the area-shared resources. NEMLEC, has been copied in the West by WMLEC, Central Massachusetts by CENTLEC, and the Boston area by METROLEC.

Chart #1 compares the projected operational costs of the police departments, if combined into one, with those maintaining two separate departments in their current form. This information assumes the combined departments will provide the same level of services to residents as currently provided.

For ease of comparison we have calculated all years in FY05 dollars. Any addition for inflation would be proportional in all areas. Costs have been allocated to the Towns of Hamilton and Wenham using the method mandated by the statute (c. 41) :(50%

valuation, 25% population, 25% road miles). This formula, with current statistics, would result in Hamilton share 64.09% and Wenham at 35.91%. (see Reference 1a for Chart #1 allocation). It should be noted that this 41:99 cost allocation produces a cost share ratio quite close to the 62%/38% ratio the towns now use for the shared emergency dispatch program. (The 62%/38% ratio is based on the relative assessed valuation of the two towns.)

Chart #1 – Operating Cost Projection Police

All figures are “annual”

**indicates income*

	Salary Police Chief	Salary Admin. Assistant	Salary Officers	Salary Overtime	Other Expenses	Police Cruisers	Ambulance Service	TOTAL
Wenham FY-05	\$92,880.00	\$34,992.00	\$548,323.00	\$163,142.00	\$63,581.00	\$30,000.00	\$40,000.00	\$972,918.00
Hamilton FY-05	\$88,420.00	\$38,158.00	\$919,795.00	\$133,990.00	\$58,500.00	\$28,000.00	*(85,000.00)	\$1,181,863.00
Total Hamilton & Wenham FY-05	\$181,300.00	\$73,150.00	\$1,468,118.00	\$297,132.00	\$122,081.00	\$58,000.00	*(45,000.00)	\$2,154,781.00
Projected if combined Year #1	\$181,300.00	\$73,150.00	\$1,535,692.00	\$303,075.00	\$122,081.00	\$58,000.00	\$360,000.00	\$2,633,298.00
Projected if combined Years #2-20	\$105,000.00	\$40,000.00	\$1,535,692.00	\$326,845.00	\$105,000.00	\$58,000.00	\$360,000.00	\$2,530,537.00
Projected Combined Savings	\$76,300.00	\$33,150.00			\$17,081.00	\$0.00		
Projected Added Costs Years #2-20			(\$67,574.00)	(\$29,713.00)			(\$405,000.00)	(\$375,756.00)
Wenham Share Years 2-20	\$37,705.50	\$14,364.00	\$551,467.00	\$117,370.04	\$37,705.50	\$20,827.80	\$129,276.00	\$908,715.84
35.91%								
Hamilton Share Years 2-20	\$67,294.50	\$25,636.00	\$984,225.00	\$209,474.96	\$67,294.50	\$37,172.20	\$230,724.00	\$1,621,821.16
64.09%								
Wenham Savings Years 2-20	\$55,174.50	\$20,628.00		\$45,771.96	\$25,875.50	\$9,172.20		Net - \$64,202.16
Wenham added costs year 2-20			(\$3,144.00)				(\$89,276.00)	
Hamilton Savings Years 2-20	\$21,125.50	\$12,522.00						
Hamilton added costs year 2-20			(\$64,430.00)	(\$75,484.96)	(\$8,794.50)	(\$9,172.20)	(\$315,724.00)	Net - (\$439,958.16)

Reference 1a. for Chart #1

M.G.L. Chapter 41, Section 99 B-K Allocation of Combined Police Department Operating Costs			
	Wenham	Hamilton	TOTAL
Valuation	\$692,245,572	\$1,211,722,290	\$1,903,967,862
Percentage	0.364	0.636	
Road Miles	31	62	93
Percentage	0.333	0.667	
Population	5,008	8,315	13,323
Percentage	0.376	0.624	
Calculation	0.727	1.273	
	0.333	0.667	
	0.376	0.624	
	1.43639	2.56361	
41-99 ALLOCATION	35.91%	64.09%	

Massachusetts General Laws Chapter 41, Sections 99 B-K.

Provides the formula for allocation of costs:

50% assessed valuation

25% road miles

25% population

Reference 1b. for Chart #1

5% Salary Increase Resulting from “The Best of Both Contracts”						
	Hamilton	Wenham	Difference	Factor	Factor	Addition
Salary – Patrol Officers	\$828.34	\$841.77	\$13.43	Hamilton Officers	10	\$6,983.60
Salary – Sergeants	\$952.59	\$968.04	\$15.45	Hamilton Sergeants	3	\$2,410.20
Salary – Lieutenants	\$1,035.42	\$1,052.21	\$16.79	Hamilton Lieutenants	1	\$873.08
Shift Differential	5% - 7%	7% - 9%	2%	Hamilton Officers	6	\$5,252.64
EMT Stipend	\$1,859.00	\$1,500.00	\$359.00	Wenham EMTs	6	\$2,154.00
EMT Training	Paid	Unpaid	60 hrs/man	Wenham EMTs	5	\$10,230.00
Vacations	7 days/week	5 days/week	8 days/yr	Wenham Officers	9	\$14,400.00
Personal Time	2 days/yr	6 days/yr	4 days/yr	Hamilton Officers	14	\$11,200.00
Longevity/Merit	6.25% avg	4.5% avg	1.75%	Wenham Officers	9	\$7,420.42
Clothing/Cleaning Allowance	\$925.00	\$1,400.00	\$475.00	Hamilton Officers	14	\$6,650.00
					TOTAL	\$67,573.94
	FY05	Salary	Officers	\$1,468,118.00	Percent	5%

CHART #1 ASSUMPTIONS

Salary - Police Chief

No reduction in current salaries for Year One. In Year Five it is expected that one chief would have retired and the position pay has been set commensurate with the expected level of a department of twenty-five officers. The second "chief" could be assigned as deputy chief until a retirement takes effect.

Salary - Administrative Assistant

Year One has both administrative assistants continuing in their current capacity for transitional purposes, then reduced to one in subsequent years. The number of duties for this position in a combined department would remain the same, however the actual amount of work included with each duty would increase. Some administrative duties may have to be transferred to other personnel to accommodate this added work load.

Salary – Officers

The departments' collective bargaining agreements reflect significant differences in the following areas: salaries, shift differential, personal leave time, vacations, sick leave accrual and buy-back, longevity, EMT and merit pay, clothing and cleaning allowances. These inconsistent items will eventually be settled by negotiations likely resulting in "the best of both contracts", a nearly 5% increase of \$67,574 in the salary line as detailed in Reference 1b for Chart #1 - 5% Salary Increase. We have allowed for a reasonable chain of command for the sixteen patrol officers. If the departments were combined we would recommend the following: one chief, two or three lieutenants, four (if three lieutenants.) or five sergeants. This would allow for supervision 24/7 and be in line with supervisory levels of comparably- sized departments in the Commonwealth. This balance of personnel could be accomplished with the current rank structure in both Departments.

Overtime

In year one, overtime has been increased by 2% to accommodate the combination of the two collective bargaining agreements. In Year Five we have added 10% calculating the likely reduction in the use of part-time officers. Part-time officers generally require a smaller investment in training and are compensated at a rate approximately 50% of a full-time officer paid overtime. An examination of departments across Massachusetts reveals that part-time officers serve in much greater numbers in smaller departments than larger ones. The reason for the diminishing use of part-time people in larger departments is not easy to explain. As departments get larger in size, the ability for "management" to know all the employees diminishes. Small Towns can "get to know" all of their personnel, even the part-time officers. Larger communities are less likely to accept the liability of part-time people, with less training than required of full-time, without the benefit of that personal contact. A comparison of area Departments Officer and staffing levels follows on page 29 showing that generally, the larger the department, the fewer part-time Officers it employs.

Other Expenses

Some office equipment expenses (e.g., photocopier) could be reduced through a shared facility, although increased usage would shorten the useful life of some equipment. There would be an initial expense in officer equipment to standardize the uniforms and weapons in use. Hamilton Officers are issued Beretta handguns, while Wenham Officers carry Glock. Officer Safety dictates that all members of a department carry the same weapon. Training, maintenance and repair are also important reasons to mandate that all officers carry the same weapon. The expense required to standardize the handgun in a combined department would cost about \$800 per officer. The actual amount would depend on the trade value of the surplus weapons. The "Other Expenses" line has not been reduced in year one to accommodate the cost of standardizing the uniforms and weapons in a combined department. It should be noted that the issues of uniform and weapon selection are some of the most problematic due to officer preference.

Police Cruisers

We have assumed a level amount of funding for cruisers. The amount of miles driven by a department determines the need for cruiser expense (fuel & maintenance) and replacement. We based this assumption on the fact that providing level service would require the same number of miles driven per year. There is no way to maintain response times and police visibility while driving fewer miles. Most all of police services including preventive patrol, enforcement, emergency response, and community policing are delivered by vehicle. Therefore we have assumed that there would be no cost savings or increases in this area related to consolidation of departments.

Ambulance Services

The most dramatic and problematic service adjustment of any combination of police and fire services would be realized in the delivery of ambulance services. Ambulance service in Hamilton is provided by on-duty police officers and insurance companies of patients are billed for the service. Wenham residents are transported and billed for this service by a private ambulance company from Danvers at a cost per year to the town to have an ambulance available. Firefighters and police officers also respond and provide emergency services until the ambulance arrives and assist with the patient as necessary.

Chart #1 displays the Hamilton INCOME of (\$85,000) in the Ambulance Service column and the Wenham EXPENSE of \$40,000 for the private ambulance contract.

Hamilton's on-duty police officers respond to requests for an ambulance with the nearest cruiser and the ambulance housed at police headquarters. This service results in a very short response time and generates net revenue to the town of about \$85,000.00 per year.

Wenham pays a private ambulance service in Danvers to provide an ambulance with attendants. While the ambulance is en route, on duty police and call firefighters respond to provide first responder/first aid services. The private ambulance service is paid \$40,000.00 per year. Medical calls comprise approximately 50% of fire department total calls; representing roughly \$70,000.00 in call firefighter wages (roughly 1/2 of the current \$141,000 budget line for call wages).

It is likely the ambulance service as it now exists would not be possible to maintain in a combined department. Scheduling and stipend issues covering officers, certified or not as ambulance operators, and the legal problems preventing a combined department from requiring current non-EMT Officers to become so, would make the continuation of a police run ambulance in a combined department very challenging and would likely require a second vehicle.

The most practical options for delivery of ambulance services in a two-town combined department would be:

1. Contract with the private service in Danvers to provide ambulance coverage for Hamilton. This option would result in a net loss in revenue of \$85,000.00 and an addition of a minimum of \$40,000.00 in expenses while increasing response time by more than 10 minutes, as Hamilton is a longer distance from the ambulance garage in Danvers. This option could not be considered as level service due to the greatly extended response time. If Hamilton wanted to keep the response time down by having an ambulance and crew housed in the town by the private service, the cost would be expected to be similar to the \$346,951.92 per year paid for this level of service by the bordering Town of Ipswich. It would be reasonable to assume that the ambulance housed in Hamilton under such an agreement, would be able to also cover the Town of Wenham. We therefore have assumed ambulance costs in years 2-20 to be \$360,000. Chart #1 assumes this option.
2. Have the Hamilton Fire Department provide delivery of ambulance services. This option would entail significant expense adding EMT firefighters and training current firefighters. In order to maintain the current response time the fire department would have to become a 24/7/365-career force. The Fire Department section of this report will deal with the costs surrounding this option. This option would require significant time to implement and would surely be the most expensive option.

Total

Chart #1 illustrates projected combined Hamilton-Wenham savings generated in years 2-20 by reductions in Salaries of Chief \$76,300.00, Administrative Assistant \$33,150.00, and Other Expenses \$17,081.00, are outweighed by anticipated increases in Officers' Salaries (\$67,574.00), Overtime (\$29,713.00) and especially Ambulance Service (\$405,000.00). Net operational expenses of a combined department (excluding the building) are estimated to rise by \$375,756 over current levels. This large increase is the result of the change in delivery of ambulance service.

It is important to note that the cost increases projected in Chart #1 will be borne mainly by the Town of Hamilton. Wenham's projected police budget will be reduced by \$64,202, while Hamilton's would rise by \$439,958. If the Towns were to agree to share the costs equally they would each be responsible for an increase in the \$188,000 range.

**Police Department Operating Costs Per Capita
Area Departments
FY-04**

	Population	Number of Full- time Officers	Number of Full- time officers per 1000* population	Number of Part- time Officers	Budget	Budget per Citizen
Andover	32000	54	1.7	0	\$5,250,000.00	\$164.06
Beverly	39000	68	1.7	18	\$5,200,000.00	\$133.33
Danvers	28000	47	1.7	0	\$4,500,000.00	\$160.71
Essex	3500	8	2.3	12	\$618,923.00	\$176.84
Hamilton	8315	15	1.8	10	\$1,137,070.00	\$136.75
Ipswich	13500	25	1.8	17	\$2,246,816.00	\$166.43
North Andover	29000	41	1.4	10	\$3,469,147.00	\$119.63
Peabody	50000	91	1.8	0	\$6,500,000.00	\$130.00
Wenham	5008	10	2.0	12	\$826,239.00	\$164.98

*The F.B.I. Publication "Crime in the United States 2002" reports the **average** full-time law enforcement officers per 1000 population in New England towns of under 10,000 population to be **2.3**.

BUILDING PROJECTIONS

First of all the consultants confirm that both towns now have police stations that are undersized and obsolete and that replacement is strongly recommended.

A financial comparison between building separate or a two-town combined police facility assumes the following:

Hamilton's current proposal for a \$3.1 million dollar, approx. 16, 000 sq. ft. police station including 1,045 square feet for the shared emergency dispatch center would reasonably cover the needs of the town for the next 40+ years.

Wenham's 6000 sq. ft. proposed project should be considered as a "minimum standard" project, which does not allow for future growth.

Any project of this magnitude should be designed to meet a 40-year need. We sized Wenham's station at 10,000 square feet, in the following chart to make it comparable in scope to Hamilton's.

The following recommendations include, among other factors, consultations we had with architects and contractors, but are not the result of an architectural needs assessment.

Building Size Worksheet

	Square Footage	Cost	Per Year Cost for 20 Years
Separate Hamilton Police Building	16,000	\$3,100,000.00	\$228,625.00
Separate Wenham Police Building	10,000	\$2,100,000.00	\$152,250.00
Total Projects	26,000	\$5,200,000.00	\$380,875.00
Combined Project			
Town Land	20,000	\$4,200,000.00	\$309,750.00
Hamilton Share per c. 41, §99	64.09%		\$198,518.78
Wenham Share per c. 41, §99	35.91%		\$111,231.23
Combined Project			
Private Land	20,000	\$4,400,000.00	\$324,500.00
Hamilton Share per c. 41, §99	64.09%		\$207,972.05
Wenham Share per c. 41, §99	35.91%		\$116,527.95

Costs are computed per year by the straight-line method assuming a declining balance of the principal. Payments remain level over 20 years at the interest rate of 4% in Year One, moving up to 5% in Year Twenty.

The combined project is sized at 20,000 square feet, a level that will provide the same functional room per officer, as separate stations. The savings are attributable to the elimination of duplication in sally port, physical plant, lobby, etc., and should result in an approximate 25% reduction in the total project size and cost. This study was not intended to be an architectural needs study. We have based the size of the projects on information provided to us by the Town of Hamilton in HKT Architects, Inc., Space Comparison - Downsized Police & EOC dated 12/27/01. These figures fairly represent equal projects for the basis of comparison.

Two different land scenarios are assumed:

1. Location of the project on land owned by one of the towns, and
2. Location of the project on privately owned property on, or near, the town line.

Approximately 2 acres of property would provide the land area necessary for both the structure and adequate parking. Land taking is not always easy and can result in costly and time consuming litigation. Based on available market and valuation data, we have estimated a needed 2 acres at \$300,000.00. There are currently only three parcels of land listed for sale in Hamilton and Wenham. The total acreage of the three parcels (.23a + 10.26a + 9.28a) is 19.77 acres. The total asking prices of the three (\$145,000 + 1,195,000 + 1,500,000) is \$2,840,000.

This averages to \$143,652 per acre. We caution that this would be a conservative estimate and does not include any amount for litigation, or allowance for the delays that opposition would create.

Chart #2 was based on a joint building project on town owned land. There was no land cost entered for either town. This projection adds the projected costs of a building project onto the operational costs contained in Chart #1.

Chart #2 – Operating and Building Cost Projection – Police

All figures are annual

	Salary Police Chief	Salary Admin. Assistant	Salary Officers	Salary Overtime	Other Expenses	Police Cruisers	Ambulance Service	Building Projected	TOTAL
Wenham FY-05	\$92,880.00	\$34,992.00	\$548,323.00	\$163,142.00	\$63,581.00	\$30,000.00	\$40,000.00	\$152,250.00	\$1,125,168.00
Hamilton FY-05	\$88,420.00	\$38,158.00	\$919,795.00	\$133,990.00	\$58,500.00	\$28,000.00	(\$85,000.00)	\$228,625.00	\$1,410,488.00
Total Hamilton & Wenham FY-05	\$181,300.00	\$73,150.00	\$1,468,118.00	\$297,132.00	\$122,081.00	\$58,000.00	(\$45,000.00)	\$380,875.00	\$2,535,656.00
Projected if combined Year #1 Town Land	\$181,300.00	\$73,150.00	\$1,535,692.00	\$303,075.00	\$122,081.00	\$58,000.00	\$360,000.00	\$309,750.00	\$2,943,048.00
Projected if combined Years #2-20 Town Land	\$105,000.00	\$40,000.00	\$1,535,692.00	\$326,845.00	\$105,000.00	\$58,000.00	\$360,000.00	\$309,750.00	\$2,840,287.00
Projected Savings	\$76,300.00	\$33,150.00			\$17,081.00	\$0.00		\$71,125.00	
Projected Added Costs Years #2-20			(\$67,574.00)	(\$29,713.00)			(\$405,000.00)		(\$304,631.00)
Wenham Share Years 2-20 35.91%	\$37,705.50	\$14,364.00	\$551,467.00	\$117,370.04	\$37,705.50	\$20,827.80	\$129,276.00	\$111,231.23	\$1,019,947.06
Hamilton Share Years 2-20 64.09%	\$67,294.50	\$25,636.00	\$984,225.00	\$209,474.96	\$67,294.50	\$37,172.20	\$230,724.00	\$198,518.78	\$1,820,339.94
Wenham Savings Years 2-20	\$55,174.50	\$20,628.00		\$45,771.96	\$25,875.50	\$9,172.20		\$41,018.78	Net - \$105,220.94
Wenham added costs			(\$3,144.00)				(\$89,276.00)		
Hamilton Savings Years 2-20	\$21,125.50	\$12,522.00						\$30,106.23	
Hamilton added costs			(\$64,430.00)	(\$75,484.96)	(\$8,794.50)	(\$9,172.20)	(\$315,724.00)		Net - (\$409,851.94)

Although combined building costs savings are a substantial \$71,125 per year, when combined with the projected increase in operational costs from Chart #1, the result is a net cost increase of \$304,631 per year for providing Police and ambulance services.

It should be noted that these projections are based on maintaining the same level of police and ambulance coverage in both Towns. Some would assert that, if combined, the Departments would be able to have fewer Officers "on the street" than the total currently on duty in both Town's individually. There is no patrol coverage benefit realized by simply combining the Departments. The measure of coverage is solely dependent on how many Officers are available and on patrol. If either or both Towns are willing to accept a reduced level of Police service, they may do so as individual towns.

The allocation of these costs under MGL 41-99 would again favor Wenham. Approaching the building project as an intermunicipal agreement between and among multiple municipal bodies, would certainly entail a number of fiscal, political and coordination challenges. Both Towns have been proceeding with projects different in scope, (Hamilton: 1066 square feet per full-time officer, Wenham: 600 square feet per full time officer) and on different timetables (Wenham is further along in the process). The costs of such negotiations would be hard to identify but would certainly be substantial. They would certainly include investment of large amounts of staff time, the likelihood of a need for consulting, mediation, and legal services.

Fire Consolidation

Fire Departments

The Hamilton and Wenham Fire Departments are both combination fire departments comprised of career and paid on-call personnel. Evaluations of both departments are based on current National Fire Protection Association standards. The standard used is NFPA 1720-Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the public by Volunteer Fire Departments, 2004 edition. In this case over 80% of each department's personnel are classified as paid on call volunteers by this standard. This national consensus standard was developed by a myriad of national organizations representing fire professionals, fire volunteers and municipal officials.

Insurance Ratings and Potential Homeowners' Savings

The towns' fire departments have current Insurance Service Organization (ISO) ratings of 4 (Hamilton) and 5 (Wenham). On a scale of 1 to 10, higher numbers indicate higher rates. Both departments are due for review of their rating by ISO; any significant investment and effort to lower their respective ratings would not be noticeable by the individual taxpayer. The effect seen on a residential homeowner's fire insurance, as part of upgrading, would never be realized over the life of a conventional policy or home ownership. The current policies of providing automatic or mutual aid response more than satisfies any ISO ratings regarding communications, water supply capabilities, staffing and response times.

Services Provided

Both fire departments provide fire suppression and some level of emergency medical response. In addition, they provide traditional fire department emergency services to motor vehicle accidents, hazardous materials awareness and operations level response, and some levels of technical rescue. Mandated fire prevention and inspection duties are performed, including smoke detector certificate issuance, plans review and underground storage tank inspections.

Deployment Capabilities

National standards provide minimum criteria for the deployment of personnel to fire suppression, emergency medical calls, and special operations incidents. These standards require the deployment to a single family detached non-sprinklered residential structure of 2000 sq . ft. to consist of 10 personnel, and arrival of those personnel within 10 minutes 80% of the time. In discussions with both chiefs, their respective departments currently exceed this minimum standard. In order to satisfy a higher standard (NFPA 1710), that career fire departments are measured against, it would require 15 personnel within 8 minutes. Each community would need to hire career personnel so that staffing levels of four personnel per apparatus were maintained 24/7 365 days a year. This would require the hiring of 11 full-time personnel in Wenham and 9 in Hamilton costing approximately \$528,900 in full-time salaries to each town. (See staffing costs estimate below.) This figure does not include the cost of benefits as they are covered in a segregated municipal line item. There would be no gain in service, as those personnel who are currently employed by the Wenham DPW would still be utilized as part of their collateral duties. Wenham currently expends \$43,455 and Hamilton \$128,605 in full-time firefighter salaries. This already established fire force is a win/win for the municipality.

Staffing Cost Estimate

24/7/365 Career Fire Department

24 hour on 48 hour off Rotation

4 Man Squads (1 Supervisor; 3 Firefighters)

Career Firefighter Average 43,000 x 3 = 129,000. (Wenham 43,455/Hamilton 42,868)

Shift Supervisor (Lt. at 10% increment) = 47,300.

Squad 176,300.

x 3 squads 3

\$528,900.

Emergency Medical Services

Current emergency medical service responses comprise 10% of the responses in Hamilton and almost 50% of the responses in Wenham. EMS is provided by the Police Department in

Hamilton. The emergency medical capabilities provided privately at the Paramedic Level is a benefit for both communities. Deployment to emergency medical service incidents is also required in the NFPA standard. This requires 2 personnel, trained at the First Responder and/or EMT level, be on scene within 4 minutes, and paramedic service within 8 minutes 80% of the time. Statistics provided show that Hamilton and Wenham meet the First Responder/EMT Basic Life Support (BLS) criteria. The Commonwealth currently requires all police and firefighters to be trained in CPR annually, and trained at the first responder level. All EMS programs in the Commonwealth are evaluated and inspected by personnel from the Office of Emergency Medical Services within the Department of Public Health. Wenham's Class 5 non-transportable ambulance customarily has the patient treated and stabilized for transport prior to the private contractor's arrival. The national standard requires the municipality to state in the contract with the private provider that they meet the standard, that it arrive on scene within 8 minutes 80% of the time.

Discussion

Scenario A: Hamilton and Wenham Fire Departments Remain Physically and Administratively Separate.

Wenham

1. The cost to renovate the existing Wenham station should include future growth for staffing capabilities and 24/7 coverage. This would include, but not be limited to, training rooms, sleeping quarters, day room/kitchen area, administrative offices, storage of equipment, separate decontamination area for equipment (separate for EMS and Fire Suppression), showers and locker room, a physical-and a fitness facility. In addition, all national life safety, fire prevention and state building codes should be addressed. A comprehensive use and planning study should be conducted to develop specific cost figures.

The current housing of apparatus (1) at the Wenham highway garage could continue, however we recommend a separate facility that would include the following: a separate day room, storage for equipment, a kitchen area, showers and

locker facilities, an administrative area, and a training room. Again, a planning and cost study would need to be done to develop specific cost factors.

Staffing: Wenham would need to hire a minimum of 12 full-time personnel to staff the Rt. 1A/Friend Ct. station 24/7. This would ensure compliance with national standards of a minimum of 4 personnel per apparatus. In a response scenario this would meet the minimum of 4 persons on scene, with the 2 in/ 2 out safety factor for initial entry. It would also satisfy national standards on BLS/EMS patient care. The department could still utilize existing call personnel for supplemental response in support of the initial response capabilities. This includes the full-time Chief. Staffing at the station at the Wenham Highway Garage should continue as is, utilizing highway department personnel who have collateral duty as call fire department personnel. The only reason to consider hiring any fulltime personnel would be if the highway department personnel no longer served as call fire personnel due to attrition or other personnel issues.

Hamilton

2. This scenario includes a number of factors that the community would need to assess before undertaking this project. The building of a new fire station should include a specific needs analysis based on the projected number of responses and; projected response times to meet national standards, all built around a specific community wide risk/benefit analysis. If the assumption is made that building a new station in the Gordon Conwell Seminary is a life safety issue because of the seminary, then one needs to look at this cost to the town of building and staffing a fire station versus the built-in fire protection and alarm systems for the seminary at their own expense. Renovating/refurbishing the Rt. 1 A station would include the following: specific training rooms, sleeping quarters, day room/kitchen area, administrative offices, storage of equipment, separate decontamination area

for equipment (separate for EMS, and Fire Suppression), fire garage, showers and locker room and a physical fitness facility. In addition, all national life safety, fire prevention and state building codes should be addressed

Staffing: Based on current response information the assignment of fulltime staff at the existing Hamilton Station on Rt. 1 A meets the response and staffing issues for day-time coverage only. Staffing would need to be expanded to include 9 additional full-time personnel to meet the minimum national standards for deployment, and response time capabilities for 24/7 coverage. The current full-time Chief's position should remain as is. Current numbers of call personnel appear to be sufficient and a configuration of call personnel could be assigned to the new station if one was built at Gordon Conwell Seminary.

Scenario B: Hamilton and Wenham Fire Partially Consolidate.

1. The rationale for moving existing full-time fire department personnel from the Hamilton station to a new facility in East Hamilton or East Wenham cannot be adequately discussed without gathering further information. A comprehensive needs analysis based on risk versus benefit must be conducted. It is our opinion, based on response times and current staffing capabilities that the expense to build a new station, and then staff it with existing career personnel would be cost prohibitive. The factors listed in Scenario A (2) would need to be considered as well. Call personnel could supplement the station, but that capability currently exists so there is no gain in cost, only in response time.
2. The remodeling/rebuilding of the current Wenham station at Rt. 1A/Friend Ct. still includes all of the information from Scenario A (1).
3. The remodeling/rebuilding of the current Hamilton station at Rt. 1A still includes all of the information from Scenario A (2).

CONCLUSION

While the concept of regionalization and sharing of services raises expectations of a panacea of cost savings, the case for full combination cannot be made in any of these scenarios as it relates to staffing and deployment capabilities. A comprehensive risk analysis of both communities based on NFPA Standard 1201 Emergency Services Risk Management, 2004 edition, needs to be done. This study examines the built environment, life safety capabilities, geography and demographics, public life safety and education programs, as well as deployment and staffing. This study of police and fire services consolidation is a small piece of that equation. The cost considerations will need to include a complete architectural/engineering study for build factors of new versus cost of remodeling or refurbishing. The current system of separate departments, staffed with some full-time personnel supplemented by call personnel appears to work extremely well. The joint response capabilities across town lines are not unusual and there should be a written Memorandum of Understanding (MOU), if not already in place. Hamilton and Wenham departments are backed up by a comprehensive Essex County Mutual Aid system, which can be called upon at anytime. The current configurations for deployment and staffing meet the minimum national standards.

Conclusions

Police and fire services are delivered all over town. They are not "headquarters-based" such as services provided by schools and libraries. Police officers and firefighters come to their customers; buildings play only a small part in the delivery of services. The value of a shared station should not be overestimated. Our charts bear out that the operating costs of providing police and ambulance services are more important than building costs when annualized.

The Towns have taken advantage of many cost saving methods over the years most noticeably in shared dispatch. The occasional problematic issues of command and control over dispatch are more than offset by the cost savings because one dispatcher can often complete all the necessary tasks for both towns. Staff reductions of this sort are not the case with police officers or firefighters where reduction will directly and proportionally affect the level of services delivered. If both towns' departments' maintained individual dispatch centers, as is very common, the expected cost would be an additional \$260,000.00 per year.

It should be noted that the combination of dispatch service is a cooperative arrangement between the Police and Fire Departments of both Towns. This should be recognized as a major cost advantage not often utilized in Massachusetts.

The Towns also provide back-up services to each other resulting in significant cost savings. Many calls for service require two officers to respond, for officer safety, and in Hamilton, for staffing of the ambulance. While these calls are being answered, as both Departments often run a two-officer shift, a second call for service would have to go unanswered unless "coverage" was available from a neighboring Town. The Towns' call volumes indicate that duplicate calls of significant enough magnitude to require more than two Officers are likely to occur more than 10 times per week. The addition of another Officer in either, or both, Towns would be costly. The result of the current back-up system is that residents of both Towns have the benefit of being able to "borrow" coverage under the cover of mutual aid when needed.

The Towns also realize significant benefit from their membership in NEMLEC. The specialty services available from this regional group would be cost prohibitive to most member Towns. This coordination of manpower, training and equipment has become a model for other areas of the Commonwealth.

Hamilton and Wenham have already taken advantage of the most effective areas for cost savings. The sharing of a building or command staff are untried and unproven in Massachusetts. If town officials believe the townspeople will support the time-consuming effort it will take to negotiate the myriad of details of shared facilities and combined departments; the officials should weigh the costs illuminated in this report against the costs of political and legal process needed to achieve consolidation.

It is very difficult, perhaps impossible, for any police or fire department to be under the policy control of multiple political bodies. Police and fire departments are para-military in nature and a direct chain of command is necessary for their efficient operation and control. Hiring, promotion and discipline can be severely compromised, if answerable to multiple political bodies. Although Hamilton and Wenham officials have rejected the c.41 option, we see the legal and operational structure it offers as the only viable option for effective functioning of combined police departments.

A c.41 regional police district, overseen by district commissioners and a c.48 regional fire district with fire district commissioners, would replace the role currently held by the Hamilton and Wenham Boards of Selectmen over the towns' public safety operations. The districts have the ability to raise funds outside of Proposition 2 ½, and a district meeting of voters would control their respective budgets.

The combination of police departments would likely result in Hamilton's ambulance service moving quickly from the Police Department to a private service.

Combination of the fire departments would likely result in the evolution of a full-time career department of 18 - 20 firefighters, which, with the addition of 4 more, firefighters could eventually assume ambulance duties. The larger fire department is less able to rely on volunteers and would be a more expensive option than the current system.

The need for new, or upgraded, police and fire headquarters is clear. Each Town can size its projects to its own standard if they remain separate.

There is no cost savings apparent from a combination of Police Departments in the two Towns. The savings in building costs are more than made up for by increases in operational and ambulance costs. It should be re-emphasized here that this is because the Towns have already taken advantage of all the truly effective methods of cost savings through cooperative combination available to the professions in the Commonwealth.